

## SECTOR 7

### SOUTH COAST OF ENGLAND—DOVER STRAIT—NORTH FORELAND TO SELSEY BILL

**Plan.**—This sector describes the SE coast of England from North Foreland to Selsey Bill, including the English Inshore Traffic Zone within Dover Strait. The descriptive sequence is from NE to SW.

#### General Remarks

**7.1** Shipping lanes in the area are among the busiest in the world and for the safety of navigation Traffic Separation Schemes have been introduced to alleviate maritime casualties.

The United Kingdom Department of Transport view is that if a vessel, other than one less than 20m in length, a sailing vessel, or a vessel engaged in fishing, commences its voyage from a location beyond one limit of the Inshore Traffic Zone and proceeds to a location beyond its furthest limit, and is not calling at a port, pilot station, destination, or sheltered anchorage within the Inshore Traffic Zone, then that vessel should, if it can safely do so, use the appropriate lane of the adjacent Traffic Separation Scheme unless some abnormal circumstance exists in that lane.

In that context, reduced visibility in the area or the density of traffic using a lane does not justify use of the Inshore Traffic Zone.

The existence of a Traffic Separation Scheme (TSS) does not imply that the traffic lanes have been adequately surveyed. In addition, the existence of sandwave areas, where depths may be less than charted, should also be taken into account by masters of deep-draft vessels. See paragraph 6.4 for further details.

The inshore waters described in this sector, from the meridian of North Foreland Light, lie within the English Inshore Traffic Zone of the Dover Strait TSS.

Regulations concerning the use of Inshore Traffic Zones are given in the rules of the International Regulations for Preventing Collisions at Sea (72 COLREGS). Rule 10 of these regulations states that a vessel shall not use the inshore traffic zone when it can safely use the appropriate traffic lane within the adjacent traffic separation scheme. However, vessels of less than 20m in length, sailing vessels, and vessels engaged in fishing may use the inshore traffic zone.

Notwithstanding the above, a vessel may use the inshore traffic zone when enroute to or from a port, offshore installation or structure, pilot station or any other place situated within the inshore traffic zone, or to avoid immediate danger.

A vessel outbound from a port is recommended to join the adjacent traffic lane as soon as possible, as provided for and described in the rules.

**Pilotage.**—Vessels bound for ports in Dover Strait and the English Channel area may wish to pick up a deep-sea pilot before reaching the complex Traffic Separation Schemes. Such pilots, who are properly licensed, should be requested through the various pilotage agencies based in the British Isles or other European countries.

**Reporting Systems.**—The Dover Strait Reporting System (CALDOVREP) is a mandatory reporting system under

SOLAS regulations which operates in the Dover Strait Traffic Separation Scheme (TSS).

For further details concerning CALDOVREP, see paragraph 6.4.

The Ship Movement Reporting System (MAREP) is a voluntary reporting system operating in the English Channel and Dover Strait. Vessels are requested to report to the appropriate shore station when approaching the following:

1. The TSS off Ile d'Ouessant.
2. The TSS off Casquets.
3. The TSS within Dover Strait.

For further details of MAREP, see Pub. 140, Sailing Directions (Planning Guide) North Atlantic Ocean, Baltic Sea, North Sea, and the Mediterranean Sea.

Due to the CALDOVREP reporting system being mandatory in the area of the Dover Strait TSS, vessels are advised that this system takes precedence over the Ship Movement Report System (MAREP), which is voluntary.

**Directions.**—The main coastal route connects to the N with the Outer Passage, which crosses the Thames Estuary. For more information concerning the Outer Passage, see Pub. 192, Sailing Directions (Enroute) North Sea.

Vessels bound for the N part of the North Sea usually keep to the E side of the Outer Passage. They pass E of the East Goodwin Lightvessel (51°13'N., 1°36'E.), W of South Falls, and E of Drill Stone.

Vessels heading S usually keep to the W side of the passage. They pass E of Kentish Knock and then shape a course to lead E of Elbow Lighted Buoy and E of North Foreland. Vessels then pass E of NE Goodwin Lighted Buoy (5°20'N., 1°34'E.), E of E Goodwin Lighted Buoy (51°16'N., 1°36'E.), E of SE Goodwin Lighted Buoy (51°13'N., 1°34'E.), clear of East Goodwin Lightvessel (51°13'N., 1°36'E.), SE of S Goodwin Lighted Buoy (51°11'N., 1°32'E.), NW of CS4 Lighted Buoy (51°09'N., 1°34'E.), SE of SW Goodwin Lighted Buoy (51°09'N., 1°29'E.), and SE of South Goodwin Lightvessel (51°08'N., 1°28'E.).

Light-draft vessels may also transit The Downs and Gull Stream, which are described in paragraph 7.5 and paragraph 7.6, respectively.

**Caution.**—An offshore scallop fishing ground extends from a line S of Rye (50°43'N., 0°50'E.) to a line S of Selsey Bill (50°43'N., 0°47'W.), 60 miles W, in a zone 15 miles wide.

Fishing vessels may be encountered anywhere within the area described in this sector, which includes the entire W portion of the SW traffic lane of the Dover Strait TSS and the waters lying close W of it.

An area to be avoided surrounds CS4 Lighted Buoy (51°09'N., 1°34'E.), which marks the NW limit of the Dover Strait TSS. This area, which may best be seen on the chart, has been established because of the damage inflicted by vessels that have been set down onto the buoy by the tidal currents.

## North Foreland to Ramsgate

**7.2 North Foreland** (51°22'N., 1°27'E.), with its nearly perpendicular chalk cliffs and prominent light tower, forms the S entrance point of the Thames Estuary. In good weather it is usually the first point of land seen when approaching Dover Strait from the NE.

For more information concerning North Foreland and the waters located to the N of it, see Pub. 192, *Sailing Directions* (Enroute) North Sea (Sector 4).

The clifly coast in the vicinity of North Foreland is fringed by rocky ledges, which extend up to about 0.2 mile offshore. A very conspicuous building stands 1.5 miles WNW of the light and, when viewed from N, is the highest landmark in this area.

**Elbow** (51°22'N., 1°31'E.), a sandy ridge, forms the NE extremity of the shoal bank extending seaward from North Foreland. It is marked by a lighted buoy moored about 3 miles ENE of the light.

**Broadstairs** (51°21'N., 1°27'E.), a small town fronted by a drying boat harbor, is situated 1 mile S of North Foreland.

Broadstairs Knolls, with depths of less than 5m, are the outermost shoal patches on the flats that front the coast between Ramsgate and North Foreland. They extend up to about 1.5 miles seaward and are marked by a lighted buoy moored 1.8 miles ESE of Broadstairs.

**7.3 Off-lying banks.—South Falls** (51°23'N., 1°47'E.), with a least depth of 6.4m, lies 13 miles E of North Foreland and forms the southernmost part of the Outer Banks fronting the Thames Estuary. This shoal, which is marked by lighted buoys, is about 15 miles long and consists of a narrow ridge of sand and shells.

**Drill Stone** (51°26'N., 1°42'E.), with depths of 11 to 18m, lies about 10 miles ENE of North Foreland and is marked by a lighted buoy. Strong tide rips occur in the vicinity of this patch.

**Caution.**—Outfall pipelines extend up to about 2 miles ENE from the coast in the vicinity of North Foreland and may best be seen on the chart.

Numerous submarine cables, some disused, extend seaward from points on the shore close N and about 1.5 miles S of North Foreland, and may best be seen on the chart.

A dumping area (spoil ground), which may best be seen on the chart, lies 7.2 miles E of North Foreland.

## Ramsgate (51°20'N., 1°25'E.)

World Port Index No. 35715

**7.4** Ramsgate is an artificial harbor containing Western Marine Terminal, the cross-channel ferry harbor, Royal Harbour, the old commercial port, and Inner Harbour, which is a yacht marina. The harbor is enclosed by breakwaters. East Pier and North Breakwater, its extension, provide protection on the E side while South Breakwater provides protection on the S side.

**Tides—Currents.**—The tides rises about 5.2m at MHWS and 4m at MHWN.

The tidal currents run strongly across the port entrance. It is reported that the NE current produces an eddy off the head of South Breakwater. This eddy runs SW taking vessels toward

the breakwater. The ebb current sets SW from about 6 hours after HW at Dover to about 1 hour before HW at Dover. The flood current sets NE from about HW at Dover to about 4 hours after HW at Dover. The currents off the entrance attain a maximum rate of about 1.2 knots at springs.

**Depths—Limitations.**—The main approach channel, which may best be seen on the chart, leads 2.5 miles W to the port entrance. It is marked by lighted buoys and dredged to a depth of 7.5m. The port entrance is 180m wide between the breakwater heads. The fairway channel leading through the entrance is 125m wide.

Royal Harbour, situated in the N part of the port, has an entrance, 63m wide. It is dredged to a depth of 2m and mostly used by pleasure craft. A commercial quay, 109m long, is situated at the NW side and has a depth of 2.1m alongside. Vessels up to 120m in length and 5m draft can be accommodated at HW.

The Inner Harbour, a large marina, has a dredged depth of 3m. It is entered from Royal Harbour through dock gates, 12.1m wide, which are spanned by a bascule bridge. Yachts up to 24m in length and 2.4m draft can enter.

Western Marine Terminal, the ferry harbor, has a dredged depth of 7.5m. It provides extensive facilities for cross-channel passenger and freight ferries. Three ro-ro ferry berths, with depths of 7.5m alongside, are situated at the W side of the harbor. Vessels up to 165m in length and 6m draft can be accommodated.

**Aspect.**—A lighted range, with a directional sector light, indicates the main approach channel and may best be seen on the chart.

An approach, used by small craft, is indicated by a lighted range, which may best be seen on the chart. It leads WNW and joins the main channel about 0.3 mile E of the port entrance.

The Granville Hotel, with a prominent tower, stands about 0.7 mile N of the port entrance. Conspicuous, large buildings are situated 0.2 mile W and 0.5 mile SW of this hotel.

An aluminum flagstaff standing on the NW side of the Inner Harbour, about 0.4 mile NW of the port entrance, is reported to be conspicuous. A dome situated near the shore at Pegwell, 1.2 miles W of the port entrance, is prominent from S.

**Pilotage.**—The Compulsory Pilotage Area includes the port and a segment extending 3 miles seaward between the bearings of 065° and 145° from West Pier Light (51°19.6'N., 1°25.4'E.).

An Outer Pilotage Area, which is non-compulsory, includes the waters outside the Compulsory Pilotage Area bound by a line joining (approximately) North Foreland Light, Elbow Lighted Buoy, NE Goodwin Lighted Buoy, Deal Bank Lighted Buoy, and Deal Pier.

Pilotage is compulsory for all vessels carrying petroleum products or other hazardous cargo, passenger vessels, and all vessels over 80m in length, except those exempt by law. Pilots can be contacted by VHF or telephone and board about 3 miles ENE of the port entrance.

Vessels must request pilotage by contacting the Harbor Authority through the Vessel Traffic Service (VTS) Port Control 12 hours before arriving at the pilot boarding position. Vessels should then confirm their ETA 2 hours prior to arrival.

Pilotage for the River Stour is not compulsory. However, pilots are available by prior arrangement.

Ramsgate also provides pilots for the NE Spit (Thames Estuary) pilot boarding area. See Pub. 192, *Sailing Directions (Enroute)* North Sea for further information.

**Regulations.**—A Vessel Traffic Service (VTS) system operates in the vicinity of the harbor and is managed by Ramsgate Port Control Center. It controls navigation within the port area and provides advice and marine information to vessels in the pilotage areas.

All vessels navigating within the harbor limits and approaches must maintain a continuous listening watch on VHF channel 14.

Any inbound vessel requiring a pilot must report to the Port Control on VHF channel 14 or by telephone 12 hours and 2 hours prior to arrival at the pilot boarding position.

All inbound vessels over 20m in length and not requiring a pilot must report to the Port Control by VHF or by telephone as, follows:

1. Conventional vessels:
  - a. 1 hour before Point Romeo (See Note 3).
  - b. 30 minutes before Point Romeo (See Note 1).
  - c. At Point Romeo (See Note 2).
  - d. Entering the channel.
  - e. Vessel secure.
2. High speed craft:
  - a. 30 minutes before Point Romeo (See Note 3).
  - b. At Point Romeo (See Note 2).
  - c. Entering the channel.
  - d. Vessel secure.

Note 1.—Vessels must advise the VTS of any circumstances which may affect the maneuvering capability and also the number of any Exemption Certificate.

Note 2.—Vessels must obtain permission to proceed into the channel or to leave a berth.

Note 3.—Vessels should keep a listening watch on VHF channel 14 from this time until secure.

Point Romeo is defined as any point on a circle with a radius of 2.5 miles centered midway on a line extending between No. 1 Channel Lighted Buoy and No. 2 Channel Lighted Buoy (51°19.5'N., 1°27.4'E.).

Vessels requiring tug services should send a request at least 3 hours in advance by VHF, fax, or telephone.

**Signals.**—International Port Traffic Signals are exhibited above the Port Control Building on the East Pier and regulate the movement of vessels to and from Royal Harbour (see paragraph 1.1).

The above signals are augmented by the Ferry Terminal Movement Signal, which is shown when a ferry is maneuvering. While this signal is displayed, no other vessels may, without permission from the VTS, enter the harbor limits from seaward, leave the Royal Harbour, or move within Western Marine Terminal.

**Anchorage.**—Ramsgate Road provides good anchorage with winds between WNW and NNE. However, S or E winds with a strong tidal current make this anchorage untenable. The recommended anchorage is in a depth of 3.5m about 0.3 mile S of the head of South Breakwater.

**Caution.**—During strong NE gales, a sand bank frequently forms at the mouth of Royal Harbour and the depths in the entrance are reduced.

Ferries, including high speed craft, enter and leave the port at frequent intervals.

A dumping ground area (spoil ground), which may best be seen on the chart, lies 1 mile SE of the port entrance.

## Ramsgate to Dover

**7.5 Pegwell Bay** (51°19'N., 1°22'E.), lying 1.5 miles WSW of Ramsgate, is fronted by a drying coastal bank, which extends up to about 1.2 miles seaward. The River Stour runs into this bay through drying flats of mud and sand. A drying channel, marked by buoys and beacons, leads through the coastal bank to the river mouth. Richborough Port, with a drying wharf, lies close inside the river mouth. Sandwich Haven, used by pleasure craft, is located about 3 miles above Richborough Port. The river is no longer used by commercial shipping.

A prominent power station chimney, with an elevation of 135m, and three conspicuous cooling towers stand about 0.8 mile WSW of the river mouth, 3 miles WSW of Ramsgate.

**Deal** (51°13'N., 1°24'E.), a small town, is situated 5 miles N of South Foreland. It extends along the shore for about 1.5 miles and is fronted by a castle, a hospital, and a barracks, which are all prominent. A T-headed pier, alongside of which berthing is prohibited, extends seaward from the shore about 0.2 mile N of the castle.

Sandown Castle, in ruins, and Walmer Castle, surmounted by a flagstaff, stand close to the N end and close to the S end, respectively, of Deal. They are both prominent from seaward.

The coast extending to the N of the town is low. The coast between a point located close S of the town and Dover consists of chalk cliffs.

**South Foreland** (51°08.5'N., 1°22.5'E.), a bold headland, is faced by chalk cliffs, which have layers of flint in horizontal lines. A conspicuous disused white light tower, 21m high, stands on the summit of this headland. An old lighthouse is situated 0.2 mile ENE of the disused tower and at a lower level.



South Foreland Light Tower (disused)

A white windmill, prominent in strong sunlight, stands 0.2 mile NE of the disused light tower.

**Dover Patrol Memorial** (51°09.4'N., 1°23.6'E.), a conspicuous stone monument, stands above the cliffs, 1.2 miles NE of the disused light tower.



**Dover Patrol Memorial**

A radar surveillance station is situated close E of the memorial.

Saint Margaret's Bay, with a beacon standing at the head, lies 0.5 mile SW of the memorial

**Tides—Currents.**—The tidal currents run strongly along the coast between South Foreland and Deal, 5 miles N. In the bay formed between Deal and Ramsgate, the currents are weak.

The currents in the vicinity of The Downs (51° 13'N., 1° 27'E.) and Goodwin Sands are mostly rotary clockwise, although the degree of rotation varies over the area. Near the E side (N portion) of Goodwin Sands, the flood current probably sets NE out of Kellett Gut while the ebb current probably sets into the it. Within Kellett Gut, the NE current is dangerous because it sets toward the sands near the time of HW.

Reports indicate that E of Goodwin Sands the flood current sometimes sets NW with considerable velocity. If this occurs, the set is likely to be strong and dangerous near the time of HW.

Care is advised, as S of South Sand Head (51° 10'N., 1° 29'E.) the flood current sets strongly toward and across the S portion of Goodwin Sands, from about 1 hour before to about 3 hours after HW at Dover.

**Anchorage.—The Downs** (51° 13'N., 1° 26'E.), an anchorage area for ocean-going vessels, lies centered about 1 mile E of the town of Deal and may best be seen on the chart. The holding ground is not good in some parts of this area, particularly S of Goodwin Fork Lighted Buoy (51° 14.3'N., 1° 26.9'E.). However, good anchorage can be taken, in a depth of 12.8m, about 1.3 miles ESE of the castle at Deal or, in a depth of 12.5m, about 1.1 miles E of Walmer Castle.

**The Small Downs** (51° 15'N., 1° 26'E.), lying 1.8 miles NNE of Deal, is an area that provides anchorage to vessels with drafts less than 5m. It is more sheltered and has better holding ground than The Downs.

**Trinity Bay** (51° 12'N., 1° 30'E.) provides good anchorage during NE winds, but the tidal currents can be strong. Vessels may anchor, in a depth of 21m, about 3.2 miles ESE of Deal.

**Caution.**—Several submarine cables, which may best be seen on the chart, extend seaward from the vicinity of Saint Margaret's Bay.

Several wrecks and obstructions, which may best be seen on the chart, lie within the anchorage areas of The Downs and The Small Downs.

**7.6 Off-lying dangers.—Goodwin Sands** (51° 14'N., 1° 32'E.), a shifting mass of drying sand banks, extends up to about 7 miles offshore between North Foreland and South Foreland. The area surrounding the sands, which may best be seen on the chart, is littered with the wrecks of numerous vessels. Some of these wrecks are visible depending on the state of the tide.

The sands are moved by the tidal currents and their forms are frequently changed. Large drying patches lie along the E and W edges. Except for The Downs, where an area of deeper water exists, the 20m contour lies to the E of Goodwin Sands.

Kellett Gut (51° 14'N., 1° 32'E.), a passage bordered by drying patches, leads 4.5 miles NE between Trinity Bay and Goodwin Knoll. This channel is unmarked and subject to frequent changes. It should only be used by small vessels with local knowledge.

**Gull Stream** (51° 18'N., 1° 30'E.) leads NE from The Downs to the North Sea or the Thames Estuary. This passage, which is marked by lighted buoys, may be used by medium-draft vessels with local knowledge. The fairway frequently changes and the navigational aids are often moved without prior notice.

A sand bar, subject to sandwave action, lies near the NE end of Gull Stream. Several shoal patches and other dangers lie in the vicinity of the channel and may best be seen on the chart.

Historically, depths over all the shoal patches in the channel have been shallower than presently charted. Periods of accretion, influenced by the ebb tidal flow, are followed by periods of erosion brought on by the effect of storms and the resulting system seems to be self-regulating. On the W side of the channel the minimum depth is about 10m. For the remainder of the channel the minimum depth is about 8m. The authorities should be contacted for the latest depth information.

## **Dover (51°07'N., 1°20'E.)**

World Port Index No. 35710

**7.7 Dover**, a fairly large artificial harbor, can easily be identified by its breakwaters and the castle surmounting the cliffs above.

Although of some commercial importance, the port is primarily used as a cross-channel terminal for ro-ro ferries. The harbor is enclosed by Admiralty Pier, Southern Breakwater, and Eastern Arm, which together form the W and E entrances to the port.

**Winds—Weather.**—The greatest proportion of wind in the Dover area is from the SW, usually with a force of 4 to 7 in the winter months.

From February to June, winds from the NE increase somewhat, nearly equaling those from the SW in May. Rain occurs mostly from October to December, nearly twice that of the summer season. Fog occurs fairly frequent in the winter, averaging about 4 or 5 days a month. During the summer haze can be a problem anytime.

**Tides—Currents.**—The tides rise 6.7m at MHWS and about 5.3m at MHWN. Tidal currents in the entrances are sub-





*Courtesy of M. J. Wilson Brantag Inc. UK*

### Dover

ject to great variations hourly. In either entrance there may be an in-flowing current in one part and out-flowing current in another.

Eddies run off the breakwater heads, and due to the variable directions of the currents, may also produce turbulence in the entrances. The sub-surface currents may differ appreciably from those near the surface and caution is necessary.

**Depths—Limitations.**—The W entrance is 225m wide, but is obstructed by foul ground and a shoal, with a least depth of 8.8m, lying on the W side of the channel. Another foul shoal area, with a least depth of 1.2m, lies on the E side of the entrance. It extends NNW from close to the W head of Southern Breakwater and is marked by a lighted buoy. The E entrance is 204m wide.

Both entrance channels are maintained with depths in excess of 10m. Vessels up to 300m in length and 9m draft can enter the port.

Outer Harbour, within which lies the anchorage, forms the central part of the port. Fairway, with a least depth of 6.4m, is the area lying between the S limit of the anchorage area and the N side of Southern Breakwater.

Eastern Docks are situated N of the E entrance and include a ferry terminal and a cargo terminal. The ferry terminal has six ro-ro berths, numbered 2 thru 7, situated along five piers, designated A thru E. The berths can handle ferries up to 200m in length and have depths up to 8.6m alongside. Five of the berths are double-decked, loading vehicles on two levels simultaneously.

The cargo terminal, South Jetty, has 220m of quayage with a depth of 8.5m alongside. It can handle vessels up to 190m in length.

Eastern Arm has one ro-ro berth and 480m of quayage. It has depths up to 10m alongside and can handle vessels up to 300m in length.

The Western Docks lie close NNW of the W entrance. Inner Harbour, the outer basin, lies between the Prince of Wales Pier and the E side of Admiralty Pier.

Admiralty Pier and its extension provide 1,100m of quayage. The former jetfoil terminal, protected by a breakwater, is situated near the root.

A train ferry berth, 290m long, is located near the seaward end and has depths up to 8.5m alongside. This berth has a double-deck span, loading rail freight on the lower section and ro-ro vehicles on the upper section. A cruise terminal lies close N of the train ferry berth. It has 360m of berthage with a depth of 10.5m alongside.

The Prince of Wales Pier provides 400m of quayage on its E side with depths up to 6.5m alongside. However, vessels may only berth alongside by special arrangement.

A catamaran (Seacat) terminal lies at the root of the W side of Prince of Wales Pier.

A hovercraft terminal lies close W of the catamaran terminal, at the N end of Inner Harbour.

Tidal Harbour, which partially dries, is entered through a channel dredged to a depth of 5m. It is mainly used by yachts.



*Courtesy of Bill Fry*

### Dover Castle and White Cliffs

Granville Docks, a wet basin, has an entrance 19.8m wide with a depth over the sill of 6.4m at MHWS. The basin has depths of 6.4m at MHWS and 5.2m at MHWN. It provides 560m of berthage and can be used by vessels up to 125m in length.

Wellington Dock, entered from the N side of the Tidal Harbour, is used as a yacht marina. The entrance is 21.3m wide and has a depth of 4.6m over the sill at MHWS. The dock has depths of 4.6m at MHWS and 3.4m at MHWN.

**Aspect.**—Dover Castle, standing on the top of the cliffs, is conspicuous along with a church tower located close SE of it. A clock tower, situated 0.8 mile N of the castle, and three radio masts, standing about 0.8 mile NE of the castle, are all prominent.

Langdon Battery, with a radar surveillance station, is situated about 0.4 mile N of the root of Eastern Arm.

A light is shown from a prominent tower, 22m high, standing on the head of Admiralty Pier. Another light is shown from a prominent tower, 21m high, standing on the W end of Southern Breakwater. A light is also shown from a prominent tower, 16m high, standing on the knuckle of Southern Breakwater.

**Pilotage.**—Deep-sea pilots for the English Channel, the North Sea, and the Baltic Sea may be ordered from Dover. Vessels should send a request at least 48 hours and 24 hours prior to arrival at the boarding place. Pilots will board at Brixham and Cherbourg (by launch or helicopter), Penzance, Fish-

guard, Pentland Firth, Dover (by launch only), or any port in NW Europe.

Pilotage in Dover Harbour is compulsory for vessels 80m or more in length, fishing vessels 47.5m or more in length, and vessels 20m or more in length which are restricted in their maneuverability or carrying dangerous substances in bulk.

The pilotage area includes the waters extending up to 1 mile seaward of the breakwaters.

All inbound vessels should send an ETA 6 hours and 2 hours in advance, requesting instructions. Vessels requiring pilotage should send a request and ETA 2 hours in advance stating their grt and maximum draft. The Dover Harbour Control may be contacted on VHF channels 16, 12, and 74.

Pilots can be contacted by VHF and board 3 miles E of the E entrance.

All vessels should maintain a continuous listening watch on VHF channel 74 until berthed.

**Regulations.**—All vessels passing the harbor and the area within 1 mile to seaward of the breakwaters should contact Dover Port Control on VHF channel 74 and report their ETA at a range of 3 miles from the port. Such vessels should then monitor the frequency for movement broadcasts.

Permission must be obtained from Dover Port Control before vessels enter or leave by the E or W entrances, even though the respective traffic signals are shown in their favor.

Vessels must not enter or maneuver within the restricted area, the limits of which are shown on the chart, lying in the

vicinity of Eastern Docks without specific permission from Dover Port Control.

**Signals.**—International Port Traffic Signals for regulating traffic entering and leaving the Outer Harbour are displayed by day and night from the head of Admiralty Pier Extension, for the W entrance, and from the Port Control Signal Station, for the E entrance (see paragraph 1.1).

Movement is allowed one-way only at each entrance. In all cases when a signal allows a vessel to proceed in one direction, a signal prohibiting movement is shown in the opposite direction.

The Port Control Signal Station is situated near the head of Eastern Arm.

Light signals may be by the Port Control and vessels not equipped with VHF. A signal of Morse SV indicates “I wish to enter the port” and Morse SW means “I wish to leave port.”

Port Control will reply either “OK” or “WAIT.”

If a signal appears to be misunderstood, a series of short flashes from Port Control indicates “STOP-WAIT.”

Fairway is patrolled by a launch with the inscription “Harbour Patrol” painted on the side. The launch is fitted with VHF and at night exhibits an all-round blue flashing light at the masthead.

The launch will, if necessary, relay messages to and from Port Control. Vessels must comply with instructions passed by the patrol launch.

**Anchorage.**—Anchorage is available, with the permission of the harbor master, and may be taken within the charted area located in Outer Harbour. The area has depths of 6.7 to 10.2m, good holding ground.

Caution is advised during strong winds, as gales between the SW and W raise a considerable scend at about HW. In E gales, smooth water may be found in the lee of Eastern Arm.

Vessels must not anchor outside of the designated area in Outer Harbour.

Several foul areas lie in the approaches to the harbor and anchoring outside is not recommended.

**Caution.**—A prohibited area, with a radius of 50m, lies close NE of the head of Eastern Arm and contains a current meter.

A prohibited area, with a radius of 50m, lies close NE of the head of Eastern Arm and contains a current meter.

Depths within the harbor are liable to change and the Port Control should be contacted for the latest information. Silting often occurs in the central part of Outer Harbour.

A spoil ground (dumping area), which may best be seen on the chart, lies centered 1.5 miles SSE of the E entrance.

Vessels passing Dover are warned that cross-channel ferries, including high speed craft, frequently enter or leave the port by both the W and E entrances. Vessels are cautioned to keep at least 1 mile seaward of Southern Breakwater.

## Dover to Folkestone

**7.8** The coast between Dover and Folkestone, 5 miles SW, is formed mostly by chalk cliffs.

Shakespeare Cliff, 103m high, stands about 1 mile SW of Dover and is the first chalk cliff. It is prominent and appears conical when seen from the E. Abbot's Cliff, standing 2.5 miles SW of Dover, is also prominent

A conspicuous radio mast, with an elevation of 382m, is situated near Hougham, about 0.7 mile N of Abbot's Cliff.

**Copt Point** (51°05'N., 1°12'E), with a conspicuous Martello Tower standing above it, is located 4.5 miles SW of Dover. Copt Rocks, formed by drying ledges of sandstone, front the point and extend up to 0.3 mile E.

Mole Head Rocks extend SW from Copt Rocks to the vicinity of the entrance to Folkstone.

East Wear Bay lies between Copt Point and Abbot's Cliff, 2 miles NE. It provides good holding ground and is sheltered on the W side. However, this bay is recommended only as a temporary anchorage for vessels waiting for the tide. The best berth is in the middle of the bay, in a depth of about 9m.

**Caution.**—Numerous wrecks, which may best be seen on the chart, lie offshore between Dover and Folkstone.

Yacht racing marker buoys are moored in season (April to November) about 0.6 mile WSW of Abbot's Cliff.

Several submarine cables, which may best be seen on the chart, extend seaward from the vicinity of Copt Point.

## Folkestone (51°05'N., 1°12'E.)

World Port Index No. 35700

**7.9** Folkestone is a terminal for cross-channel ferries, including high speed craft. It is rarely used by other regular cargo vessels.

**Tides—Currents.**—The tides rise about 7.2m at MHWS and 5.7m at MHWN.

Off the head of the breakwater, the ENE tidal current starts about 2 hours before HW at Dover and attains a rate of 2 knots at springs. The WSW tidal current starts about 3 hours 20 minutes after HW at Dover and attains a rate of 1.5 knots at springs.

During the ENE current, an eddy runs W along the coast from Copt Point, and sets strongly toward the South Quay head.

**Depths—Limitations.**—Three berths, with depths of 5 to 6m alongside, are situated along the NE side of the main breakwater and are used by ro-ro ferry vessels and high speed craft. Outer Harbour dries but has depths of 3 to 4.5m at HWS. South Quay, at the S side of Outer Harbour, has a depth of 5m alongside at HWS. The N side of Outer Harbour is used by fishing vessels and pleasure craft.

**Aspect.**—A light is shown from a prominent tower, 13m high, standing at the head of the main breakwater. A lighted range, which may best be seen on the chart, indicates the approach to the ferry berths. A conspicuous motel is situated about 0.2 mile WNW of the root of the main breakwater.

**Pilotage.**—Pilotage is compulsory, except for vessels exempt by law. Pilotage should be requested from the Port Control. Pilots may be contacted by VHF and board by arrangement. Vessels should contact the Port Control on VHF channel 15 and request permission to enter or leave the port.

**Signals.**—International Port Traffic Signals are displayed from a mast at the head of the main breakwater. These signals control vessels leaving and entering, and, when shown, ensure that traffic is one-way (see paragraph 1.1).

**Anchorage.**—Anchorage off the port is exposed, and should only be used by vessels waiting for a favorable tide to enter

harbor. The best holding ground is in depths of 12 to 18m, clay and sand. A good berth is with Copt Point, 1 mile NE of the harbor, in line with the light on the breakwater bearing 025°, and approximately 0.2 mile distant.

**Caution.**—High speed ferry craft may be encountered in the approaches to the port.

## Folkstone to Dungeness

**7.10** The coast between Folkestone and Dungeness, 13 miles SW, forms a bay the shore of which is low and flat. However, near Folkestone the interior hills join the coast and it becomes cliffy.

Sandgate is situated about 2.5 miles W of Folkstone. Sandgate Roads provide sheltered anchorage, in depths of 11 to 15m, good holding ground, mud and clay.

Two conspicuous green domes, surmounting hotels, are situated about 1 mile W of Folkstone and about 1 mile E of Sandgate.

**Hythe** (51°04'N., 1°04'E.) is situated about 2 miles WSW of Sandgate. Hythe Flats form a shallow bank fronting the shore in this vicinity and may best be seen on the chart. An outfall sewer pipeline extends 1.5 miles SSE across the flats.

A conspicuous radio tower, with an elevation of 268m, stands on Tolsford Hill, about 2 miles N of the town of Hythe.

To the SW of Hythe, the shore is low and flat with only embankments to hold the marsh land in place.

Dymchurch is situated 4 miles SW of Hythe and 7 miles N of Dungeness. Dymchurch Wall, an embankment protecting the pasturage of Romney Marsh, extends along the coast and terminates in Dymchurch Redoubt, 2 miles NE.

Six prominent Martello Towers stand along the shore between Dymchurch and Hythe. A conspicuous red brick tower is situated at Littlestone-on-Sea, 2.5 miles SSW of Dymchurch.

East Road provides anchorage, sheltered from SW through W to N, in depths of 12 to 18m, about 3 miles E of the tower at Littlestone-on-Sea.

Roar Bank, a ridge of sand with depths of 2.5m, runs nearly parallel with and about 1 mile off the shore to the E of Littlestone-on-Sea. Vessels should avoid this bank by keeping in a least depth of 10m.

A conspicuous dark grey water tower stands 0.8 mile inland at Lydd-on-Sea, 2 miles S of Littlestone-on-Sea and 2 miles N of Dungeness.

**Dungeness** (50°55'N., 0°59'E.), the SE extremity of a large area of marsh, is a very low point. It is steep-to on the SE side but fronted elsewhere by a shingle beach which is progressively advancing seaward.

A main light is shown from a conspicuous tower, 43m high, standing on the point. This tower is floodlit at night.

A prominent disused light tower is situated 0.3 mile W of the light.

The prominent buildings of a nuclear power station, 51m high and marked by red lights, stand 0.5 mile W of the light. These buildings are radar conspicuous.

It is reported by vessels approaching from SW that the power cables and pylons running inland in a WNW direction from the power station appear prominently on radar prior to the low shoreline.



**Dungeness Light**

For information concerning the Dover Strait TSS, off-lying banks, and navigation aids in this vicinity, see paragraph 6.3 through paragraph 6.6.

**Caution.**—A rifle range, with a danger area extending 2 miles seaward, is situated close SW of Hythe. When firing is taking place, red flags are displayed by day and red lights are exhibited at night between Dymchurch Redoubt and Hythe. Range safety craft also patrol the area.

When approaching from E, vessels must take care not to confuse the water tower standing near Lydd-on-Sea, 2 miles N of Dungeness, with either of the two light towers at Dungeness.

Several disused submarine cables, which may best be seen on the chart, extend seaward from a point on the shore about 1 mile N of Dungeness.

## Dungeness to Beachy Head

**7.11 Rye Bay** (50°54'N., 0°49'E) lies open to the S between Dungeness and Fairlight, 12 miles W. It has low marshy shores which are marked on the E side by several concrete observation towers.

West Road provides shelter from winds between N and E in the E part of the bay. The best anchorage lies, in a depth of 8m, inside of Stephenson Shoal, about 3 miles WSW of Dungeness Light.

A number of banks, including Boulder Banks, Tower Knoll, and Fairlight Knoll, lie in the W part of the bay and may best be seen on the chart.

**Rye Harbour** (50°57'N., 0°44'E.) (World Port Index No. 35690) lies at the mouth of the River Rother, near the head of the bay. It is mostly used by pleasure craft. The town of Rye stands about 1.5 miles NW of the mouth. It is built on sandstone rock and rises above the surrounding marshes. The land on either side of the river mouth is flat with no landmarks.

The entrance, which lies between two training walls, is approached directly from seaward. A fairway lighted buoy is moored about 2 miles SSE of the harbor entrance. A sand bar lies at the entrance and has a depth of 5.2m at HWS.

The main commercial quay, 180m long, is situated 1 mile above the entrance. Vessels take the muddy ground at LW.



Tides rise about 5.4m at springs and 3.6m at neaps. Vessels up to 80m in length and 4.5m draft can be handled at HWS.

Local knowledge is advised. Pilotage is compulsory for vessels over 30m in length. Vessels should send an ETA at least 24 hours in advance. Vessels should only contact the port by VHF when they are less than 10 miles from the entrance and wait for the pilot near the fairway lighted buoy.

**7.12 Hastings** (50°51'N., 0°35'E.), with the town of St. Leonards located close W, stands on high ground about 3 miles WSW of Fairlight, the W extremity of Rye Bay. These two resort towns are separated by a prominent valley with buildings on each side. Hastings is fronted by a promenade and a small pier. The coast extending close E of the town is composed of steep, yellow-brown cliffs broken by grassy slopes. Fairlight Down is located E of the town and about 1.5 miles W of Fairlight. It has an elevation of 172m and is the highest area of land in this vicinity. A prominent hotel fronts the town of St. Leonards.

Hastings Shoal, lying about 0.8 mile S of the town, and Four Fathoms Sand Ridge, lying 4 miles S of the town, may best be seen on the chart. The latter shoal extends NE and merges with the coastal bank fronting the shore of Rye Bay.

Anchorage may be taken during fair weather off Hastings. The best berth lies, in a depth of 6m, sand and mud, about 0.6 mile S of the pier.

Bexhill, situated 4.5 miles WSW of Hastings, can be identified by its numerous red brick houses. The old town, surrounded by trees, stands on a hill, about 0.5 mile inland.

Pevensy Bay is a slight indentation in the coast extending between Bexhill and a low projection, marked by a light, known as Langney Point. The shore of this bay is mostly flat and desolate, except for a line of martello blockhouse towers standing along the W side. Anchorage within this bay is not recommended. A marina, protected by breakwaters, is situated close N of Langney Point.

A prominent gas storage tank stands about 1 mile W of Langney Point. A conspicuous building, 81m high, is situated near the shore at the S end of Eastbourne, 2.7 miles SW of Langney Point.

The conspicuous dome of the Isaac Newton telescope (observatory) is situated at Herstmonceux, 5 miles N of Langney Point.

**Eastbourne** (50°46'N., 0°17'E.), a resort town, extends about 3 miles SW from close W of Langney Point to within 1.5 miles of Beachy Head. It is fronted by promenades, large buildings, and hotels. A pier, 295m long, extends seaward from the town.

Anchorage, sheltered from winds from W through N to NE, may be found, in a depth of 9m, sand and mud, good holding ground, about 0.8 mile SE of the pier. However, care is necessary to avoid the wrecks lying in this area.

**Caution.**—Fishing nets, marked by small buoys, may be encountered within Rye Bay.

Drift net fishing is carried out between Royal Sovereign Shoals and Dungeness, from May to July and November to January.

Lydd firing range, with a danger area extending 3 miles seaward, is situated between Dungeness and Rye. When firing is taking place, red flags are displayed by day and red lights are

exhibited at night from two observation towers. Range safety craft also patrol the area.

An outfall pipeline, marked at its outer extremity by a lighted buoy, extends about 1.7 miles SSE from a point on the shore at the E end of Bexhill.

An outfall pipeline extends about 1.8 miles SSE from the vicinity of Langney Point.

**7.13 Off-lying dangers—Shingle Bank** (50°44'N., 0°35'E.), with a least depth of 14.8m, lies 7.5 miles S of Hastings. A dredging area, within which gravel is extracted, lies in the vicinity of this bank. It is marked by buoys and may best be seen on the chart.

**Royal Sovereign Shoals** (50°44'N., 0°26'E.), a group of rocky patches with a least depth of 3.5m, lie centered about 7 miles E of Beachy Head and directly in the path of vessels heading for Dungeness. Strong eddies are formed over these shoals at springs and the sea breaks heavily on the heads during bad weather.

**Royal Sovereign Light** (50°43'N., 0°26'E.) is shown from a prominent tower, 28m high, standing on Southern Head, at the S side of Royal Sovereign Shoals. The light structure surmounts a helicopter deck standing on a concrete column.



Royal Sovereign Light

## Beachy Head to Selsey Bill

**7.14 Beachy Head** (50°44'N., 0°15'E.), a steep cliffy headland, is very remarkable, especially when viewed from the SW, because of its long line of white segmented cliffs known as The Seven Sisters. This headland is radar conspicuous.

A main light is shown from a prominent tower, 43m high, standing on drying rocks, which front the base of the cliff. A conspicuous watch tower (radio) is situated on the head, about 0.5 mile ENE of the light.

A prominent disused lighthouse, 14m high, stands on the summit of the cliffs, about 1 mile W of Beachy Head.

The Seven Sisters front the coast between Birling Gap, 1.3 miles W of the head, and the valley of the Cuckmere River at Cliff End, about 2.5 miles WNW of the head.

A prominent hotel stands at Birling Gap and a conspicuous water tower is situated about 1.3 miles N of it.



**Beachy Head**



**Beachy Head Light**



**Beachy Head Disused Light Tower**

Seaford Head, 83m high, rises 1.3 miles W of the Cuckmere River and 2.5 miles SE of the entrance to Newhaven. It has a chalky, but rust-streaked, appearance and may also be identified by a patch of green on the face of the cliff, just under the summit. A conspicuous barn stands 0.8 mile E of this head.

The town of Seaford is situated close W of Seaford Head. The coast abreast the town is fronted by numerous groins, the larger of which are marked by beacons.

The foreshore between Beachy Head and Seaford consists mainly of rocky ledges and shingle, strewn with boulders fallen from the cliffs above.

Anchorage may be taken all along this part of the coast, with offshore winds, in depths of 7 to 16m.

**Caution.**—During bad weather, vessels should keep at least 2 miles from Beachy Head in order to avoid the overfalls.

Vessels proceeding E and close to the coast, in poor visibility, should take care not to mistake Seaford Head for Beachy Head.

**7.15 Newhaven** (50°47'N., 0°03'E.) (World Port Index No. 35650) lies at the mouth of the Ouse River, about 8.5 miles WNW of Beachy Head. The port is used by commercial vessels and cross-channel ferries.

**Tides—Currents.**—Tides rise about 6.7m at springs and 5m at neaps.

**Depths—Limitations.**—The entrance channel, which has a least width of 70m, is dredged to a depth of 6m. The S part of the harbor adjacent to the ferry berths is dredged to a depth of 5.5m. There is a marina and berths for small craft on the W side of the harbor. East Quay, at the E side of the harbor, is the main commercial wharf. It is 510m long and provides five berths with depths of 4.5 to 5m alongside. North Quay is 360m long and has a depth of 2.1m alongside.

Vessels up to 165m in length and 7.6m draft can be handled at HW. Large vessels take the soft mud bottom at LW.

**Aspect.**—The harbor may be easily identified from seaward by its outer breakwater curving from the W shore. A light is shown from a prominent tower, 14m high, standing on the breakwater head.

A conspicuous television mast stands on high ground about 1 mile NW of the harbor entrance.

**Pilotage.**—Pilotage is compulsory for all vessels over 49m in length. Vessels should send an ETA 12 hours in advance through their agent. Vessels should then send a request for pilotage 2 hours before ETA on VHF channel 12. Pilots can be contacted by VHF and board about 1 mile SW of the breakwater.

**Regulations.**—No vessel may enter or leave the harbor without permission from the harbormaster or in contravention of the traffic signals.

No vessel may be navigated so as to interfere in any manner with the arrival or departure of an advertised passenger vessel.

**Signals.**—The following traffic signals, displayed vertically, are shown from a mast near the head of the West Pier:

1. An orange triangle over an orange ball by day, or a green light at night, indicates that vessels may enter the harbor, but no vessels may leave.
2. An orange ball over an orange triangle by day, or a red light at night, indicates that vessels may leave the harbor, but no vessels may enter.

3. An orange triangle with an orange ball above and below it by day, or a green light with a red light above and below it at night, indicates that the port is temporarily closed to traffic.

4. An orange ball by day, or a green light over a red light at night, indicates that vessels less than 15m in length may enter or leave with care.

**Anchorage.**—Good anchorage, during offshore or E winds, can be taken, in a depth of 7m in Seaford Road, about 1.3 miles ESE of the breakwater head. It is reported (2000) that anchorage can be taken, in a depth of 14m, good holding ground, about 1 mile SW of the breakwater.

**Caution.**—High speed craft may be encountered in the approaches to the port.

An outfall pipeline extends about 1 mile S from a point on the shore 0.5 mile E of the harbor entrance.

The entrance channel is subject to siltation and local knowledge is required.

**7.16 Brighton** (50°49'N., 0°08'W.), a coastal resort center, is situated 8 miles WNW of Newhaven. The coast between this town and Shoreham, about 4 miles W, is built up and contains many churches, hotels, and large buildings.

Two piers, which are no longer usable, front the town of Brighton and an extensive marina, protected by two curved breakwaters, is situated at its E end. It is reported (2002) that the westernmost pier was destroyed by a storm.

Rodean School, with a rambling building and two spires, is situated 0.4 mile E of the marina and is prominent from seaward.

A conspicuous television tower stands on a hill at the E end of Brighton, about 0.8 mile NW of the marina.

A prominent black windmill stands near the shore, about 1.3 miles ESE of the marina.

**Caution.**—Lobster pots are frequently placed up to 0.5 mile offshore between Brighton and Newhaven.

Several lighted buoys (special), which are used as recreational racing marks, are moored up to 3 miles offshore between Shoreham and Newhaven. Other temporary buoys may be moored close off Brighton, from March to October.

A sewer outfall pipeline, the seaward end of which is marked by a lighted buoy, extends about 1 mile SSW from a point on the shore about 3 miles ESE of the marina.

## Shoreham (50°50'N., 0°15'W.)

World Port Index No. 35630

**7.17 Shoreham** is a small commercial port situated at the mouth of the River Adur, about 20 miles WNW of Beachy Head. It is protected by breakwaters and divided into three parts. Western Arm leads W from the entrance and is formed by the lower reaches of the river. Eastern Arm leads E from the entrance to The Canal, a wet basin.

**Winds—Weather.**—The greatest percentage of the wind is from the SW throughout the year, with force 3 to 4 most common. Winds from the NW to NE occur at night and are more marked in winter than summer, when they reach mean speeds of about 10 knots. Fog occurs on the average of 3 to 4 days a

month in winter, but less in summer. Visibility is often restricted by haze.

**Tides—Currents.**—The tides rise about 6.3m at springs and 4.8m at neaps.

Within the harbor, the flood tidal current sets almost entirely up Western Arm. It can attain a rate of 4 knots at springs in the narrowest section. Eastern Arm has practically no current, even at the height of the flood.

**Depths—Limitations.**—The entrance channel between the breakwaters is 122m wide. There is a least depth of 1.9m on the entrance range. Vessels may take the mud ground at LW in both Eastern Arm and Western Arm.

The main quay in Eastern Arm is Outer Lay-by Wharf, which is situated on the S side. It is 260m long and has a depth of 1.6m alongside. Vessels up to 120m in length, 20m beam, and 6.7m draft can be handled at this quay at HW.

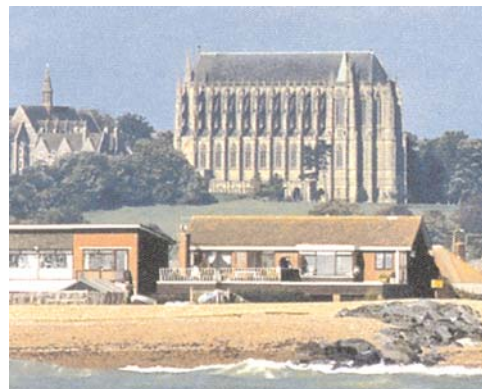
Western Arm provides about 1,840m of total quayage. There are nine berths, 80 to 346m long, with depths of 0.5 to 1.8m alongside. Vessels up to 83m in length, 14.3m beam, and 5.5m draft can be handled at HW.

Two locks provide access to The Canal. Commercial vessels enter the wet dock through Prince Philip Lock. Vessels up to 106m in length and 16.4m beam can enter, with drafts up to 6.7m at springs and 5.5m at neaps. Prior approval from the authorities is required for vessels over 103m in length. A yacht lock is situated within the confines of the existing Prince George Lock.

The wet basin has depths of 7 to 7.6m and provides about 3,600m of total quayage. There are 21 berths, 61 to 406m long, and two turning basins. There are facilities for general cargo, timber, bulk, and tanker vessels.

**Aspect.**—A lighted range indicates the approach to the harbor. The rear range light, known as the High Light, is shown from a prominent stone tower, 12m high.

A church, with a prominent tower and flagstaff, is situated in the W part of the port. The conspicuous chapel of St. Nicholas Lancing College stands inland, about 2.4 miles NW of the harbor entrance.



Lancing College Chapel

A conspicuous chimney, 103m high, stands at a power station located in the vicinity of the harbor. A prominent chimney, 91m high, stands at a cement works located about 3 miles NW



of the harbor entrance but is only visible between NNW and NNE.



**Shoreham Power Station**

**Pilotage.**—Pilotage is compulsory for vessels over 50m in length and all vessels carrying dangerous cargo. Pilots can be contacted by VHF and board within 2 miles of the harbor entrance.

**Regulations.**—Vessels over 50 grt should send an ETA to the Port Control Office at least 24 hours in advance. The message should include name, draft, beam, and length.

Vessels should then contact the Port Control when within VHF range. A continuous listening watch should be maintained on VHF channel 14 when entering the port. Tidal and navigation information is available on request.

This port lies at the W limit of the Inshore Traffic Zone.

**Anchorage.**—Anchorage can be taken anywhere S of the harbor, according to draft. The best holding ground lies in a depth of 6m, sand and gravel over clay, about 1 mile S of the entrance.

**Caution.**—Several wrecks lie in the approaches to the port and may best be seen on the chart.

A sewer outfall pipeline, the seaward end of which is marked by a lighted buoy, extends about 1.6 miles S from a point on the shore about 0.8 mile E of the entrance.

The harbor is subject to siltation and the authorities should be contacted for information concerning the latest depths.

**7.18** The coast between Shoreham and Littlehampton is low and backed by the South Downs. Chanctonbury Ring, a clump of trees standing on the highest part of the downs, is prominent and often the first landmark sighted when approaching the land in this vicinity.

The towns of Lancing, Worthing, and Goring by Sea stand along the shore, with no break between them.

A number of prominent buildings stand near the shore, about 3 miles W of Shoreham. A conspicuous gas storage tank is situated about 4.5 miles W of Shoreham, at the E end of Worthing.

Worthing is fronted by a pier, with a pavilion at its outer end. The town is low-lying, distinguishing it from Brighton, which stands on a cliff.

A church, with a prominent spire, is situated Goring by Sea, 4.5 miles E of Littlehampton and a gas storage tank stands 0.5

mile NE of it. Highdown Hill rises to an elevation of 80m about 1.5 mile NW of the church. It has two chalk pits on the W slope and one larger pit on the E slope.

Rackham Hill, with a conspicuous clump of trees, rises inland about 6 miles NNE of Littlehampton. A deep break in the downs, formed by the valley of the River Arun, is located 2 miles W of this hill and is prominent from seaward.

**Caution.**—A sewer outfall pipeline extends about 3.5 miles S from a point on the shore about 2.5 miles W of Shoreham harbor entrance.

A sewer outfall pipeline, the outer end of which is marked by a lighted buoy, extends about 2 miles SSE from a point on the shore 0.6 mile E of Littlehampton harbor entrance.

Buoys (special), used as racing marks, may be moored off-shore between Shoreham and Littlehampton from April to October.

Several dangerous rocks, which may best be seen on the chart, lie up to 2 miles offshore between Shoreham and Littlehampton.

**7.19 Littlehampton** (50°47'N., 0°32'W.) (World Port Index No. 35610) lies at the mouth of the River Arun and is a small commercial port and yachting center.

**Tides—Currents.**—The tides rise about 5.9m at springs and 4.4m at neaps.

The tidal currents are strong and may attain a rate of 6 knots between the piers. The flood current continues until about 1 hour 30 minutes after HW at springs and 30 minutes after HW at neaps. The ebb current continues until about 4 hours before HW.

**Depths—Limitations.**—The harbor is formed by the lower reaches of the river. The entrance, 33m wide, lies between two pile piers. A low training wall, covered at half-tide, extends seaward from the E pier and is marked at its outer end by a beacon.

The bar fronting the entrance dries up to 1m. The entrance channel dries until abreast of the E pier, where there are depths of 1 to 2m. There are berths for recreational craft and a marina along the W bank of the river.

There are two commercial berths, 80m and 100m long, at the E side of the harbor. Vessels take the ground at LW. Vessels up to 2,000 dwt and 70m in length can be handled, with drafts up to 4.6m at springs and 3.8m at neaps.

**Aspect.**—Lighted range beacons indicate the approach to the harbor. A fort, in ruins, stands on the shore near the root of the W pier. The town stands on the E bank and is centered about 1 mile N of the entrance.

A prominent gas storage tank stands about 0.8 mile NW of the harbor entrance. A conspicuous block of apartments, 38m high, and another conspicuous building are situated 0.3 mile ENE and 0.8 mile E, respectively, of the harbor entrance.

**Pilotage.**—Pilotage is compulsory for vessels over 50 grt. Vessels should send their ETA via any coast radio station 12 hours in advance. Pilots can be contacted by VHF and board within 2 miles of the harbor entrance.

**Anchorage.**—Vessels can anchor, in depths of 5 to 7m, stiff blue clay, about 2 miles S of the harbor entrance.

**Caution.**—The harbor may be inaccessible during strong SE winds.



**7.20** The coast between Littlehampton and Bogner Regis, 5 miles WSW, is low. The 10m depth contour in this area lies about 4 miles offshore. Bogner Regis, a prominent coastal resort, is fronted by the remains of an iron pier.

Pagham Harbour, an area of saltings intersected by drying creeks, lies 3.5 miles SW of Bogner Regis and 2.5 miles NE of Selsey Bill. Most of this area is a nature reserve.

The entire coast between Bogner Regis and Selsey Bill (50°43'N., 0°47'W.) is fronted by an area consisting of foul ground, rocks, and shoals. This area extends up to about 2 miles seaward and vessels should keep well clear of it.

**The Park** (50°40'N., 0°41'W.), an anchorage area, lies between the Owers Shoals and the foul ground fronting Pagham Harbour between Selsey Bill and Bogner Regis. It is well-sheltered from W and SW winds, but dangerous with winds from E to S. The holding ground is good, being a thin layer of gravel over stiff clay, and there are depths of 5 to 11m. However, this anchorage cannot be recommended for large vessels, because of frequent and sudden shifts in the wind and the rapidity with which the sea gets up, especially during the winter months.

For a description of Selsey Bill and the dangers lying off this point, including The Owers, see paragraph 2.29.

**Caution.**—An outfall pipeline extends 1.5 miles S from a point on the shore at the W side of Bogner Regis.

Loose pots may be encountered in the vicinity of Kingmere Rocks, about 5.5 miles SE of Littlehampton.

An offshore scallop fishing ground extends from a line S of Selsey Bill (50°43'N., 0°47'W.) to a line S of Rye, 60 miles E, in a zone 15 miles wide.

### English Inshore Traffic Zone

**7.21** Sector 7 has been described from the NE to SW due to the large volume of traffic that normally use the SW traffic lane of the Dover Strait TSS while proceeding from the North Sea to the Atlantic Ocean. Vessels are reminded that the Rules of the International Regulations for Preventing Collisions at Sea are applicable.

Vessels navigating in the above zone should expect to meet vessels proceeding in the opposite direction and a considerable amount of cross-channel ferry traffic in the Dungeness to South Foreland area.

**Caution.**—Royal Sovereign Shoals lie directly in the track of vessels proceeding between Beachy Head and Dungeness, and can be especially dangerous during poor visibility and on the flood when the E currents rounding the headland set down on them. The light structure, situated directly S of Southern Head, has been designed to withstand severe weather and is conspicuous (see paragraph 7.13).

Numerous wrecks lie up to 9 miles offshore, especially between Dungeness and Beachy Head. Many of these wrecks rise well above the seabed and should be avoided.